

**Amendments to the Claims:** This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently amended) An anti-microbial polymeric film comprising a polymeric substrate layer having a ~~first and second~~ surface, and on said a surface ~~thereof~~ a polymeric coating having a thickness of from about 0.01 to about 14.0  $\mu\text{m}$  and comprising an anti-microbial compound in an amount of from about 0.1 to about 50% by weight of the coating layer, ~~characterized in that (i) wherein~~ said coating provides either one or both:
  - (i) a heat-seal strength of from 100 g/in to 2500 g/in when heat-sealed to itself ~~and/or~~ and
  - (ii) ~~said coating provides a barrier to either one or both~~ water ~~vapour~~ vapor and/or oxygen, such that the water ~~vapour~~ vapor transmission rate is in the range of 0.01 to 10g/100 inches<sup>2</sup>/day and the oxygen transmission rate is in the range of 0.01 to 10 cm<sup>3</sup>/100 inches<sup>2</sup>/day/atm.
2. (Original) An anti-microbial film according to claim 1 wherein the anti-microbial compound is in particulate form.
3. (Original) An anti-microbial film according to claim 1 or 2 wherein the anti-microbial compound is present in an amount of from about 0.1 to about 5%.
4. (Currently Amended) An anti-microbial film according to claim ~~1, 2, or~~ 3 wherein the anti-microbial compound is an inorganic compound ~~containing~~ comprising a metal or metal ions selected from the group consisting of silver, copper, zinc, tin, mercury, lead, cobalt, nickel, manganese, arsenic, antimony, bismuth, barium, cadmium, ~~and~~ chromium, and combinations thereof.
5. (Currently Amended) An anti-microbial film according to claim ~~1, 2, or~~ 3, wherein the anti-microbial compound has the formula  $M^1_a H_b A_c M^2_d (PO_4)_3 \cdot nH_2O$  wherein:
 

$M^1$  is at least one metal ion selected from the group consisting of silver, copper, zinc, tin, mercury, lead, iron, cobalt, nickel, manganese, arsenic, antimony, bismuth, barium, cadmium and chromium;

A is at least one ion selected from an alkali or alkaline earth metal ion;

$M^2$  is a tetravalent metal ion;

a and b are positive numbers and c is 0 or a positive number such that  $(ka+b+mc)=1$ ;

k is the valence of metal  $M^1$ ;

m is the valence of metal A; and

$0 \leq n \leq 6$ .

6. (Currently Amended) An anti-microbial film according to claim ~~1, 2, or 3~~ wherein the anti-microbial compound has the formula  $Ag_aH_bA_cZr_2(PO_4)_3 \cdot nH_2O$  wherein:

A is an alkali or alkaline earth metal ion;

a, b and c are positive numbers such that  $(a+b+mc)=1$ ;

m is the valence of metal A;

7. (Currently Amended) An anti-microbial film according to claim ~~5 or 6~~ wherein a is in the range of 0.1 to 0.5.

8. (Currently Amended) An anti-microbial film according to claim ~~5, 6 or 7~~ wherein b is at least 0.2.

9. (Currently Amended) A film according to ~~any of claims~~ claim 5 to 8 wherein the metal A is sodium and m is 1.

10. (Currently Amended) A film according to ~~any preceding claim 4~~ wherein the anti-microbial compound ~~contains~~ comprises at least one element selected from the group consisting of silver, copper, or zinc.

11. (Cancelled).

12. (Cancelled).

13. (Cancelled).

14. (Currently Amended) An anti-microbial film according to ~~any preceding claim 1~~ wherein the haze ~~in~~ of the film is less ~~than~~ than about 15%.

15. (Currently Amended) An anti-microbial film according to ~~any of claims 2 to 14~~ claim 2 wherein ~~the~~ a volume distributed mean particle diameter of the anti-microbial particles is in the range ~~or of~~ of 1.0 to 3.0 $\mu$ m.

16. (Currently Amended) An anti-microbial film according to ~~claims 2 to 15~~ claim 2 wherein ~~the thickness of the coating layer~~ has a thickness and said thickness is in the range of 70 to 130% of ~~the~~ a volume distributed mean particle diameter of the anti-microbial particles.

17. (Currently Amended) An anti-microbial film according to ~~any of claims 2 to 15~~ claim 2 wherein ~~where~~ the thickness of the coating layer is less than ~~the~~ a volume distributed mean particle diameter of the anti-microbial particles, ~~preferably such that thickness is in the range of 70 to 99% of the volume distributed mean particle diameter of the anti-microbial particles.~~

18. (Currently Amended) A film according to ~~any preceding~~ claim 1 wherein said polymeric substrate is selected from the group consisting of polyester, polyolefin, polyamide and PVC.

19. (Currently Amended) A film according to ~~any preceding~~ claim 1 wherein said polymeric substrate comprises polyester.

20. (Currently Amended) A film according to ~~any preceding~~ claim 1 wherein said polymeric substrate comprises polyethylene terephthalate.

21. (Currently Amended) A film according to ~~any preceding~~ claim 1 ~~wherein where~~ said polymeric substrate has a degree of shrinkage in one or both dimensions of about 10% to about 60% when placed in a water bath at 100°C for 30 seconds.

22. (Currently Amended) A film according to ~~any preceding~~ claim 1 further comprising a gloss wherein the gloss is at least 70.

23. (Currently Amended) A film according to ~~any of claims 1 to 22~~ claim 1 wherein the polymer of the coating layer is selected from the group consisting of PVDC, PCTFE, PE, PP, EVOH, PVOH, EVA, polyester and caprolactone.

24. (New) An anti-microbial film according to claim 6 wherein a is in the range 0.1 to 0.5.
25. (New) An anti-microbial film according to claim 6 wherein b is at least 0.2.
26. (New) A film according to claim 6 wherein the metal A is sodium and m is 1.
27. (New) An anti-microbial film according to claim 17 wherein the thickness of the coating is in the range of 70 to 99% of the volume distributed mean particle diameter of the anti-microbial particles.
28. (New) An anti-microbial film according to claim 12 wherein said coating layer further provides an oxygen transmission rate in the range of 0.01 to 10 cm<sup>3</sup>/100 inches<sup>2</sup>/day/atm.